

WHAT IS CLAIMED IS:

1. A method for an element of forming one or more thin films on a substrate by depositing two or more materials by vacuum evaporation, comprising,

depositing each material under such control that n_i value of the each material is $k \pm 0.5$ wherein k is a constant from 2 to 5,

when relationship between a deposition position and a film thickness of a material i on the substrate is approximated by the following equation (1):

$$D_i/D_{0i} \propto (L_0/L_i)^3 \cos^{n_i} \theta_i \quad (1)$$

wherein L_0 is a distance from an evaporation source to a plane of the substrate in a perpendicular direction, D_{0i} is a film thickness of the material i at an intersection point of a perpendicular line from the evaporation source to the plane of the substrate, and D_i is a film thickness of the material i at a position on the substrate which is apart from the evaporation source by a distance L_i in a direction of an angle θ_i against the perpendicular line.

2. The method according to claim 1, wherein k is 2 to 3.

3. The method according to claim 1, wherein k is 2.

4. The method according to any one of claims 1 to 3, wherein the n_i value is controlled by (a) a method of adjusting a shape of a crucible for holding the evaporation source and/or (b) a method of adjusting evaporation rate.

5. The method according to any one of claims 1 to 4, wherein two or more materials are successively deposited to form a lamination of thin film layers.

6. The method according to any one of claims 1 to 4, wherein two or more materials are simultaneously deposited to form one film.

7. The method according to any one of claims 1 to 6, wherein a material is deposited by an eccentric rotation evaporation method.

8. The method according to any one of claims 1 to 7, wherein the materials are organic materials for organic layers of an organic electroluminescence element and the layers are formed by using the materials.

9. The method according to claim 6, wherein the materials are a host material and a dopant material of a luminous layer of an organic electroluminescence element, and the luminous layer is formed by co-depositing the host and dopant materials.

10. An organic electroluminescence element comprising organic layers formed by the method according to claim 8.

11. The organic electroluminescence element comprising a luminous layer formed by the method according to claim 9.

12. The organic electroluminescence element according to

claim 10 or 11, wherein variation of X coordinate of CIE luminescence chromaticity is 0.005/250 mm or less and variation of Y coordinate thereof is 0.02/250 mm or less.

13. The organic electroluminescence element according to any one of claim 10 to 12, wherein variation of electric power conversion efficiency is 15%/250 mm or less.